

CLAIMS:

- 1 (original). A method of processing a video including sumo comprising:
  - (a) identifying a plurality of segments of said video based upon an event, wherein said event is characterized by a start time based upon when the players line up to charge one another and an end time based upon when one of the players at least one of steps outside the ring and touches the ring surface with part of his body other than the shoes of his feet, where each of said segments includes a plurality of frames of said video; and
  - (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.
- 2 (original). The method of claim 1 wherein said event is defined by the rules of sumo.
- 3 (original). The method of claim 1 wherein said start time is temporally proximate a charge of the two players.
- 4 (original). The method of claim 1 wherein said end time is temporally proximate a stepping out of the ring.
- 5 (original). The method of claim 1 wherein said end time is temporally proximate a touching of the surface of the ring by a part of his body other than the soles of his feet.
- 6 (original). The method of claim 1 wherein said start time includes a portion of the pre-bout ceremonies.

7 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video, based upon a series of activities defined by the rules of sumo that could potentially result in at least one of:
  - (i) a score;
  - (ii) preventing a score; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

8 (previously presented). The method of claim 7 wherein said summarization of said plurality of segments is in the same temporal order as said plurality of segments within said video.

9 (previously presented). The method of claim 7 wherein said activities are determined based upon the color characteristics of said video.

10 (previously presented). The method of claim 7 wherein said activities are determined based upon scene changes.

11 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video based upon detecting a play of said sumo match, wherein said identifying includes detecting the start of said play and detecting the end of said play, where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

12 (previously presented). The method of claim 11 wherein said detecting the end of said play is based upon detecting said start of said play.

13 (previously presented). The method of claim 11 wherein said summarization identifies said plurality of segments of said video.

14 (previously presented). The method of claim 11 wherein said summarization is a summarized video comprising said plurality of segments excluding at least a portion of said video other than said plurality of segments.

15 (previously presented). The method of claim 11 wherein said start time is temporally proximate a charge of the two players.

16 (previously presented). The method of claim 11 wherein said end time is temporally proximate a stepping out of the ring.

17 (previously presented). The method of claim 11 wherein said end time is temporally proximate a touching of the surface of the ring by a part of his body other than the soles of his feet.

18 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon a frame of said video having an upper spatial region being substantially darker than a lower spatial region of said frame, where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

19 (previously presented). The method of claim 18 wherein said lower spatial region comprises, at least in part, a pair of regions having a dominant color description representative of skin tone.

20 (previously presented). The method of claim 19 further comprising said lower spatial region comprises, at least in part, a pair of regions having a dominant color description representative of stage color.

21 (previously presented). The method of claim 19 further comprising said lower spatial region comprises, at least in part, a pair of regions having a dominant color description representative of stage color.

22 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon a pair of regions having a dominant color description representative of skin tone, where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

23 (previously presented). The method of claim 22 wherein said dominant color description includes 25 percent of said pair of regions.

24 (previously presented). The method of claim 22 wherein said dominant color description includes 50 percent of said pair of regions.

25 (previously presented). The method of claim 22 wherein said dominant color description includes 75 percent of said pair of regions.

26 (previously presented). The method of claim 22 wherein said pair of regions is in the lower portion of said video.

27 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon a pair of regions generally symmetric to each other with respect to a generally center column of a frame of said video, where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

28 (previously presented). The method of claim 27 wherein said pair of spatial regions have a dominant color description representative of skin tone.

29 (previously presented). The method of claim 27 wherein said center column is within 20 percent of the center of said frame.

30 (previously presented). The method of claim 29 wherein said center column is the center of said frame.

31 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein the start of said plurality of segments is identified based upon a pair of spatial regions that move toward one another, where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

32 (previously presented). The method of claim 31 wherein said pair of spatial regions have a dominant color description representative of skin tone.

33 (previously presented). The method of claim 31 wherein said pair of spatial regions collide with one another.

34 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video,
  - (i) wherein the start of said plurality of segments is identified based upon a frame of said video having an upper spatial region being substantially darker than a lower spatial region of said frame,
  - (ii) wherein said lower spatial region comprises, at least in part, a pair of regions having a dominant color description representative of skin tone,
  - (iii) wherein said lower spatial region comprises, at least in part, said pair of regions having a dominant color description representative of stage color;
  - (iv) wherein said pair of regions are generally symmetric to each other with respect to a generally center column of a frame of said video;
  - (v) wherein said pair of regions move toward one another;
  - (vi) where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

35 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein said identifying for at least one of said segments includes detecting the start of said segment based upon processing of a first single frame of said video, where each of said segments includes a plurality of frames of said video;
- (b) verifying that said first single frame is an appropriate start of said segment based upon processing of another single frame temporally relevant to said first single frame; and
- (c) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

36 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said sumo video, wherein said identifying for the end of at least one of said segments is based upon detecting a scene change, where each of said segments includes a plurality of frames of said sumo video; and
- (b) creating a summarization of said sumo video by including said plurality of segments, where said summarization includes fewer frames than said sumo video.

37 (previously presented). The method of claim 36 wherein said scene change is based upon a threshold between at least two frames.

38 (previously presented). The method of claim 36 wherein said scene change is based upon a gradual transition below a threshold level.

39 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video;
- (b) identifying a plurality of segments that are temporally separated by a sufficiently short duration;
- (c) based upon said identifying as a result of (b) connecting said identified plurality of segments; and
- (d) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

40 (previously presented). The method of claim 39 wherein said connecting includes discarding the frames of said video between said identified plurality of segments.

41 (previously presented). The method of claim 39 wherein said connecting results in a single segment that includes said identified plurality of segments together with the frames of said video between said identified plurality of segments.

42 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, where each of said segments includes a plurality of frames of said video;
- (b) identifying at least one of said segments that has a temporally sufficiently short duration;
- (c) based upon said identifying as a result of (b) removing said identified segment from said summarization; and
- (d) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

43 (previously presented). The method of claim 42 wherein said connecting includes discarding the frames of said video between said identified plurality of segments.

44 (previously presented). The method of claim 42 wherein said connecting results in a single segment that includes said identified plurality of segments together with the frames of said video between said identified plurality of segments.



45 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of sumo, wherein said segments include full-speed plays and slow motion plays of said full-speed plays; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video, where a user may select from:
  - (i) said summarization including only full-speed plays;
  - (ii) said summarization including only slow motion plays;
  - (iii) said summarization including both full-speed plays and slow motion plays.

46 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of sumo;
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video; and
- (c) removing at least one of said segments from said summary based, at least in part, upon audio information related to said at least one of said segments.

47 (previously presented). The method of claim 46 wherein said audio information is obtained exclusively from a temporal analysis.

48 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video wherein each of said segments includes a play of sumo;
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video; and
- (c) modifying the duration of at least one of said segments from said summary based, at least in part, upon audio information related to said at least one of said segments.

49 (previously presented). The method of claim 48 wherein said audio information is obtained exclusively from a temporal analysis.

Claims 50 – 60 (withdrawn).

61 (previously presented). A method of processing a video including sumo comprising:

- (a) identifying a plurality of segments of said video, wherein the detection of graphical text segments is identified based upon:
  - (i) a pair of substantially white regions generally symmetric with respect to the center of the image,
  - (ii) said image free from other significant substantially white areas;
  - (iii) said white regions persist for a plurality of seconds;
  - (iv) said white regions preceding the start of a play;
  - (v) where each of said segments includes a plurality of frames of said video; and
- (b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video.

Claims 62 – 64 (withdrawn).